

outwards, purple, blue, green, yellow, light red, a red mixed with purple.

Then immediately followed the Colours of the third Iris, which were in order outwards a green inclining to purple, a good green, and a red more bright than that of the former Iris.

The fourth and fifth Iris seemed of a bluish green within, and red without, but so faintly that it was difficult to discern the Colours.

O B S. III.

Measuring the Diameters of these Rings upon the Chart as accurately as I could, I found them also in the same proportion to one another with the Rings made by Light transmitted through the two Object-Glasses. For the Diameters of the four first of the bright Rings measured between the brightest parts of their orbits, at the distance of six Feet from the Speculum were $1\frac{11}{16}$, $2\frac{3}{8}$, $2\frac{11}{12}$, $3\frac{3}{8}$ Inches, whose squares are in arithmetical progression of the numbers 1, 2, 3, 4. If the white circular Spot in the middle be reckoned amongst the Rings, and its central Light, where it seems to be most luminous, be put equipollent to an infinitely little Ring; the squares of the Diameters of the Rings will be in the progression 0, 1, 2, 3, 4, &c. I measured also the Diameters of the dark Circles between these luminous ones, and found their squares in the progression of the numbers $\frac{1}{2}$, $1\frac{1}{2}$, $2\frac{1}{2}$, $3\frac{1}{2}$, &c. the Diameters of the first four at the distance of six Feet from the Speculum, being $1\frac{3}{16}$, $2\frac{1}{16}$, $2\frac{3}{8}$, $3\frac{3}{16}$ Inches. If the distance of the Chart from the Speculum was in-

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